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SIMILARITY, ISOMORPHISM OR DUALITY? RECENT SURVEY EVIDENCE ON THE HRM POLICIES OF MNCS

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ABSTRACT

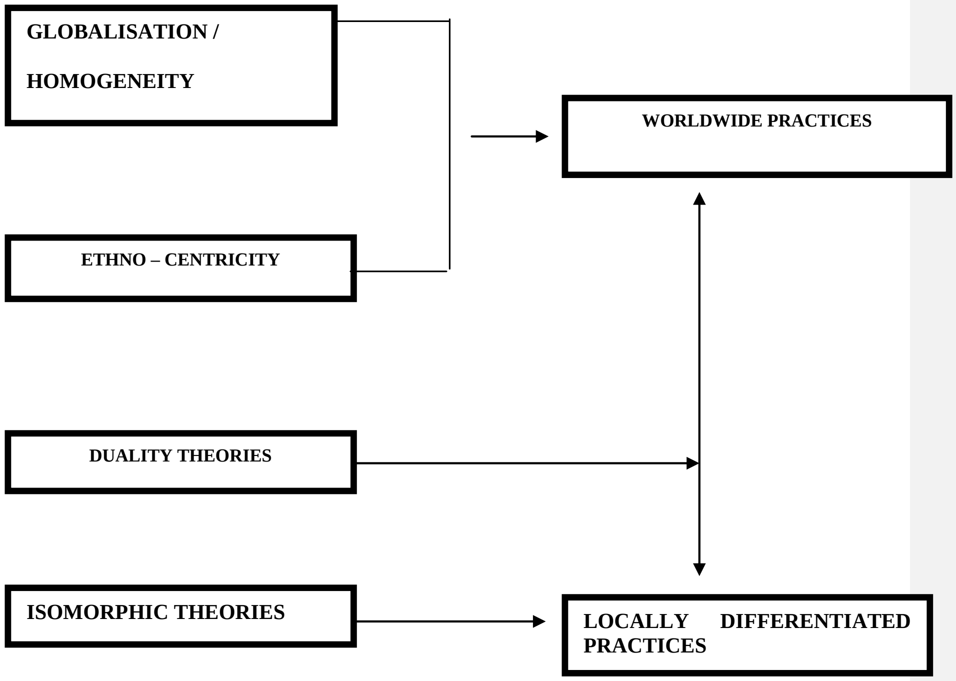
There is considerable debate as to the determinants of the HR policies of HRM: do they reflect national institutional or cultural realities, emerging common global practices, parent country effects, or the dual effects of trans-national and national realities? This paper uses an extensive international database to explore these differences, assessing variations in a range of HR practices. It finds new evidence of national differences in the manner in which indigenous firms manage their people, but also evidence of a similarity in practice amongst MNCs. In other words, MNCs tend to manage their human resources in ways that are distinct from those of their host country; at the same time, country of origin effects seem relatively weak. Whilst there is some evidence of common global practices, sufficient diversity in practice persists to suggest that duality theories may provide the most appropriate explanation.

INTRODUCTION

This paper examines the human resource management (HRM) policies and practices followed by multinational corporations (MNCs) within host countries. It addresses the issues of similarity and difference: to what extent do MNCs import their own approaches to host countries, to what extent do they adopt those of the host country or, perhaps, where do they fall between these two extremes? How different are they from their local indigenous counterparts and how are we to explain these positions?

There is an extensive debate on these issues. Three broad schools of thought can be identified (see Figure 1). First, there are theories that suggest that MNCs will tend to follow common practices whichever country they are in, either because of *global homogeneity* or because of *ethnocentricity.* In either case the implications is that the geographic host country will have little effect. Second, there are theories of *local isomorphism*, arguing that firms will invariably adjust their policies to reflect prevailing cultural and/or institutional realities in the countries in which they operate. Thirdly, *duality theories* would suggest that firms face conflicting pressures both towards and away from the local practices, which may be exacerbated by regulatory issues or rational determinants such as size, structure, market conditions and/or the strategic choices made by managers.

Figure 1: Theories of international HRM practice



HRM, as the practice most commonly "localised" (Rosenzweig and Nohria, 1994), is likely to be a key test-bed for such theories. Using extensive international survey data, we aim to shed further light on the relevance of each of these theories for explaining the specific HR strategies and policies followed by MNCs' subsidiaries in specific host countries, and the underlying causes of the choices made. The paper explores these three schools of thought, attempts a summary and examines the employment practice implications of these debates. The methodology and the database used to identify empirical evidence on these issues is explained, relevant findings are presented and conclusions are drawn about the extent of similarity, isomorphism and duality.

CONVERGENCE OR SIMILARITY THEORIES

Theories of Globalisation.

The term "globalisation" is widely deployed and often differently understood: in most accounts it refers to the recent process of unification that has taken place in markets and consumer tastes, increasingly mobile investor capital, and rapid technological change. Within and between firms, actions are increasingly grounded in a perspective that views the whole world as being nationless and borderless (Ohmae, 1990, 1996).

Whilst acknowledging that we start from regionally based economic systems, globalisation theories hold that economies are becoming globally integrated, resulting in the proliferation of global management structures, and the convergence of management techniques around shared notions of "best practice" (Sera, 1992). This has placed renewed pressures on firms to enhance their competitiveness. As their power to set prices is eroded in the face of competition, profitability increasingly depends on cutting the costs of inputs and enhancing productivity. Firms that operate across national boundaries are most exposed to the forces of globalization, and hence, are most likely to fall in line with dominant world-wide practices aimed at enhancing competitiveness in world markets.

There is a body of literature that focuses on the role of the multinational firm, and the desire to promote integrated international standards, versus pressures to be locally responsive (Ashkenas, Ulrich, Jick and Kerr, 1995; Hamal and Prahalad, 1985; Yip, 1995; Kim and Gray, 2005). The ability to deploy similar organizational practices worldwide, and to utilize the capacities of the entire firm, is likely to encourage greater homogenisation on efficiency grounds (Kostova and Roth, 2002; Zeira and Harari, 1977). Grounded in the rational choice tradition, this perspective assumes that firms pursue economic advantage through choices "guided by unambiguous preferences and bounded rationality" (Gooderham et al., 1999: 507). Industries will adopt practices that promote the maximisation of economic goals; this will result in a set of best practices diffusing across the parent economy and worldwide. Whilst the diffusion process may be slow or uneven, this will make for inter-industry and international practices that are to a large degree uniform. Firms will either try to enforce their own view of the most efficient ways of handling HRM in other countries; or they will all gradually drift towards HRM policies that mirror the most efficient, the US, model (Jain et al., 1998; McDonough, 2003; Smith and Meiksins, 1995).

The process of globalisation is a two facetted one, leading to increased competition on global product markets and increased cooperation in the form of joint ventures, reciprocal share ownership and tight subcontracting (McDonough, 2003). Global markets create new homogenous environments where the conditions in which companies operate become similar in terms of products, competition and the rate of technological change (Duysters and Hagedoorn, 2001). Global competition places greater demands on the co-ordination of resources, equipment, finance and people (Sparrow, Brewster and Harris, 2004). For example, it is important to co-ordinate pricing, service and product support worldwide as a multinational customer can compare prices in different regions. In response, the global enterprise adopts a global business strategy transcending both internal (people, processes and structure) and external (time and country) factors (Parker, 1998). Traditional business boundaries become increasingly permeable, accelerating the rate of convergence. Hence, in-firm practices become decoupled from setting, challenging national mindsets and assumptions (Sparrow and Hiltrop, 1997).

Critics of the globalisation thesis have contested the assumption that globalisation represents a new or unprecedented process (Parker, 1998). Others have suggested that even multinational firms are extremely local in terms of key areas such as employment practices: 85% of multinationals produce more than two-thirds of their output in their home market, with two-thirds of their employees being nationals of their home country (Economist, 2000b). Indeed, most MNCs cannot easily be defined as stateless (Hu, 1992); the United Nations Conference on Trade and Development (UNCTAD) index of transnationality lists only six organizations scoring above 90 out of a 100[i].

Theories of Ethnocentricity.

Alternatively, it can be argued that specific MNCs will tend towards ethnocentricity, mirroring the dominant practices of the country of origin (Zeira and Harari, 1977) and applying them wherever they operate (see, eg, Bae et al., 1998; Ferner, 1997; Horwitz and Smith, 1998; Ngo et al., 1998). It has been proposed that MNCs might adopt different approaches towards human resource management in such circumstances (see, eg, Perlmutter, 1969, and Heenan and Perlmutter, 1979, who argue that MNCs tend to adopt one of four main approaches towards human resource management: ethnocentric; polycentric; regional; and geocentric). Later writers such as Mayrhofer and Brewster (1996) argued that, in practice, the vast majority of firms are ethnocentric. Similarly, Lao and Ngo (2001) suggest that the country of origin of MNCs is likely to have a significant impact on their practices in other countries.

Theories of Localisation

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Institutional Theories. Institutional theories suggest that organizations sharing the same environment will gradually adopt similar characteristics, and hence become "isomorphic" with each other (Kostova and Roth, 2002). Three forms of isomorphism may be identified: coercive (where the firm is forced to adopt specific practices); mimetic (specific practices associated with success are adopted to avoid uncertainty) or normative (behaviour considered appropriate to the environment) (Di Maggio and Powell, 1983). Firms will conform to both the formal rules and unwritten norms of specific institutional contexts both for efficiency and legitimacy (Haveman, 1993; Kostova and Roth, 2002; Marsden, 1999). Social transactions remain embedded in specific social contexts (Boyer and Hollingsworth, 1997). This is likely to encourage the adoption of certain practices and discourage others within a particular context; those seen to be successful will be taken on board by other firms and those associated with failure discarded (Haveman, 1993). Contingent on the nature of their embeddedness – the extent to which specific practices are likely to be seen to be the most appropriate or "done thing" - there will be variations in the forms of governance and management. Conceptions of fairness and related societal norms will impact on even the most insular management style, and influence income differentials and the relative amount of resources allocated to the different strata of management (Boyer and Hollingsworth, 1997). This is reflected directly in the HR literature too (Boxall, 1999; Brewster, 2001; Brewster, Mayrhofer and Morley, 2004; De Cieri and Dowling, 1999; Ferner and Qunitanilla, 1998; Saka, 2002). The varieties of capitalism literature suggests that particular patterns of corporate governance are likely to predominate in national contexts reflecting the embedded nature of practices, and the need to for effective organizational interaction and cooperation within a particular national setting (Hall and Soskice, 2001; Dore, 2000; Lincoln and Kalleberg, 1990).

The regulationist critique of the varieties of capitalism literature suggests that whilst specific features of production regimes may indeed be complementary, regulation can never completely eliminate imbalances (Boyer, 2001; Hopner, 2005). As Marsden (1999) notes, whether in the form of legislation or informal practices, rules make for greater efficiency, in that parties to a deal can take much for granted. Whilst firms may be quick to take on board international innovations, they will, in turn, have different implications in different contexts (Boyer and Hollingsworth, 1997; Kostova and Roth, 2001; Maurice, Sellier and Silvestre, 1986). Regulationist accounts would link norms and habits with broader objective pressures towards compatibility with a national mode of regulation, or assembly of institutions designed to stabilise a specific growth process (Aglietta, 1998; Dacin, Ventresca and Beal, 1999; Grahl and Teague, 2000). Such mediation is, however, likely to be temporally confined, and likely to be punctuated by interregnum periods of experimentation (Boyer, 2001). Individual behaviours need to be consistent with the dominant schema of production (Lipietz, 1986). In specific national contexts, multinational firms may be encouraged to adopt particular sets of practices in line with national government policies and industrial strategies (and the associated needs of nationally-based large firms) or be granted a relatively free rein in an attempt to attract investment. Again, the responses of key interests in society are likely to mould the practices adopted by MNCs' subsidiaries (Guillen, 2000).

Hence, contemporary institutionalist accounts would suggest that MNCs' subsidiaries are likely to adopt similar HR practices to the countries in which they operate. However, regulationists would caution that the predominant practices within individual national settings are themselves prone to both evolution and rupture and that, owing to their disproportionate power, MNCs may be better equipped to contest any form of institutional mediation not in line with their changing interests.

Cultural Perspectives. These critical institutional perspectives have been contrasted (Brewster, 2004; Sorge, 2004) with the cultural approaches, most closely associated with the writings of authors such as Hofstede (1991), Fukuyama (1995) and Sako (1998). The latter writers accord particular prominence to the possibility that organizations represent "cultural communities" of rational utility maximizing individuals (c.f. Cooter, 2000). Variations in practices will be in line with different cultural contexts (rather than institutional setting), which will cut across national boundaries (Lao and Ngo, 2001): Bartlett and Ghoshal called this the pressure for "multi-culturalism" within international organisations.

Culturalism is a very broad school of thought. Key distinctions in different approaches to understanding culture in different natural settings are the concepts of etics and emics. Etic approaches seek to "describe phenomena in constructs that apply across cultures" (Morris et al., 1999: 782). Regional or national variations in culture are described in terms of some general or external standard or yardstick. Hence, Hofstede's (1980) framework for understanding cultural variations which seeks to identify key values, and the extent of variation thereof in different national settings, is firmly rooted in the etic tradition (Morris et al 1999). In contast, emic approaches hold that culture is best understood as an integrated whole or social system, rather than trying to identify specific components thereof (Giddens, 1990; Parsons, 1950); within this, individual and group understandings are societally and historically defined, and are best understood by attempting to see things from "the insider's point of view" (Morris et al., 1999: 781). Whilst sometimes deployed as alternative approaches (Helfich, 1999), emic and etics are not necessarily conflicting or alternative conceptualisations for understanding culture, convergence and difference on a comparative basis, but can be deployed in a complementary fashion: aspects of behaviour, for example, may incorporate both emic and etic dimensions (Berry, 1999; Helfich, 1999).

What these approaches have in common is treating culture as a given; whilst it may be possible for a society to enhance its "social capital", it is not possible to develop social trust deliberately and systematically, or radically depart from established rules and norms (Fukuyama, 1995; Lane, 1998). Culture is seen as a specific component of reality, shared by individuals as a means of conferring meaning, to add sense to social interactions. Whilst its composition may be relatively fluid and subjective, it provides a persistent boundary, horizon or "segment" to the life-world of individuals and group (Weber, 2000:207).

Both institutional and cultural theories would suggest that the need for MNCs to obtain legitimacy or adapt their activities in specific contexts is likely to make for isomorphism in line with local practices (Kostova and Roth, 2002). Giacobbe-Miller et al., (2003) suggest that individual and group cultural orientations reflect specific cultural characteristics, whilst firms will vary within specific cultures according to institutional realities. Hence, as with institutional accounts, cultural theories suggest that MNCs' subsidiaries are likely to adopt HR practices in line with their host country; however, they differ in that their conceptualisations of culture would suggest a greater degree of continuity in national practices than would be suggested by the former.

Duality Theories

Duality theories suggest that firms face conflicting pressures towards global integration *and* local adaptation (Evans et al., 2002; Gooderham et al., 1998; Kostova and Roth, 2002: Rosenweig and Singh, 1991) and that the speed at which different sets of practices are diffused is likely to vary from context to context and may vary between practices (Guler et al., 2002; and, with specific reference to HRM, Hannon, Huang and Jaw, 1995; McGuaghey and De Cieri, 1999; Schuler, Dowling and de Cieri, 1993). Whilst firms may strive to homogenize activities across national boundaries in line with a global strategy, invariably countertendencies will impel firms to take account of local difference; the outcome will therefore incorporate both national and global dimensions. The organization's positioning on the nature and extent of adoption of local practices can be explained in terms of regulatory institutions, or rational determinants such as local market conditions, ownership structures, the state of the external market and/or behavioural or attitudinal variables and factors such as whether or not the local subsidiary is engaged in joint or licensing ventures with local partners (Davis et al., 2000).

Rational Determinants - Local Market Conditions. The relative strength of local competitors may force firms to tailor their products to meet local taste or regulations, necessitating specific production policies. The ability of firms to establish a sustained competitive advantage is contingent on their ability to implement strategies that competitors are not immediately able to duplicate; such strategies vary from context to context (Park et al., 2003). Marginson et al. (1993) suggest that the relative size of a firm may impact on practices; this would encompass relative receptiveness to external environmental pressures. Complex social systems, like human resource management systems, are not so easy to imitate and may be the best sources of competitive advantage (Pfeffer, 1994; Snell, Youndt & Wright, 1996; Ulrich & Lake, 1990; Wright & McMahan, 1992).

Rational Determinants - Ownership Structures. In contrast to the Varieties of Capitalism literature that focus on a dominant mode of corporate governance within specific national contexts, MNCs may be characterized by an internal differentiation of management practices from national context to national context (Bartlett & Ghoshal, 1989). Pressures towards

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conformity with embedded local practices will be contingent not only on size, but also the firm's own ownership structures (Jain et al., 1998). Ownership structure will partially determine behaviour; will reflect whether the subsidiary is wholly or partially owned and the degree of integration or interdependence accorded to different parts of the firm. Some organizations may be more sensitive to pressures of local adaptation, while others may be more prone to internal consistency. Within the same subsidiary, some management practices might closely follow the parent company ones, while others may more resemble those of the host country.

Rational Determinants - Behavioural Variations and Strategic Choice. Symbiotic emic and etic approaches to cross-national research focus on the dialectic between the general and the spatially specific, and explore the extent to which concepts and actions simultaneously incorporate dimensions that have a universal applicability or are specific to a particular culture (Lamond et al., 2001). Hence, behavioural variations of the duality perspective accord specific attention to variations in practice within the firm (Rosenzweig & Nohria, 1994; Newbury, 2001).

Practices should be seen in terms of the active agency of subsidiary management, and the degree of discretion accorded to it (Kostova and Roth, 2002). In turn, this would reflect overall organizational strategic orientations, and the relative importance attached to conformity. Whilst local managers are required to fit in and be legitimated by the organization, local legitimacy is also dependent on compliance with local institutions and norms. Compliance with the "ways of the country" may make for greater operational efficiency (Lee and Yarwood, 1983: 657). Successful host country nationals will provide alternative role models to parent country attitudes and behaviour amongst expatriate managers; these divergent pressures will impel the firm towards both the local and the international.

Organizational outcomes will reflect the real choices made by individual actors, who may be more or less receptive to socialization in an attempt to behave in ways appropriate to their specific context (Lee and Larwood, 1983). Recurrent themes in the literature are the link between the strategy-structure configuration in MNEs and the competing demands for global integration and co-ordination versus local responsiveness (Prahalad and Doz, 1987; Bartlett and

Ghoshal, 1989: Porter, 1990). Where global integration and co-ordination is important, subsidiaries need to be globally integrated with other parts of the organisation or/and strategically co-ordinated by the parent. In contrast, where local responsiveness is important, subsidiaries should have far greater autonomy and there is less need for integration.

Regulatory Institutions. Given variations in the power of national governments and firms, a sub-school of regulationist thinking has highlighted the possibility of endemic dualities in practices; contradictory pressures exist towards greater homogenisation and localisation. Tickell and Peck, (1992: 355) argue that a global tendency towards reduced state involvement and liberalization has led to a reduction of "market distortions" that had previously included redistributive policies aimed at alleviating the plight of regions that faced long-term crises of competitiveness. Contrary to predictions of homogenisation, this has forced a greater divergence in practices, as firms operating in peripheral regions are increasingly forced to compete on cost grounds, resulting in a greater tendency towards lower value added policies than in core areas (c.f. Collinge, 1999). Similarly, Boyer and Hollingsworth (1997) suggest that institutions are nested at a range of levels – supra-national, national, and sub-national – leading to simultaneous pressures towards convergence and difference. The relative effects of one or the other reflect specific spatial and temporal dynamics. Whilst it can be argued that the growing reach of international organizations has meant that certain issues are governed across national boundaries, pressures towards the adoption of neo-liberal policies have in some cases been checked by powerful regional blocs such as the EU, or by individual nations in a relatively strong bargaining position (Haworth and Hughes, 2003).

All of the general management arguments cited above are replicated in the specific debates about HRM (see Edwards and Ferner, 2002 for a review). Certain rational, behavioural and regulationist accounts all point to simultaneous pressures towards a greater homogeneity and localisation in HR practice; however the latter would place particular emphasis on the uneven and episodic nature of these pressures, making for a greater degree of variation in practice rather than the emergence of an enduring HR order as a result of specific organizational environments and choices.

Defining Features of Employment Practices

Empirical exploration of these issues is hampered by the lack of agreement as to what should be included in HRM systems. There are two commonly cited taxonomies of defining features of national HR systems and practice to be found in the literature. The more inclusive list is found within the contemporary HRM texts, centring on the most commonly encountered functional areas of the modern HR department. Hence, to take examples from the two seminal HRM textbooks, Fombrun, Tichy and Devanna, 1984 focus on personnel selection, an appraisal system, a system of rewards and a development system, whilst Beer et al (1984) discuss employee “flows” (into, through and out of the organisation), employee influence mechanisms and rewards as the key HRM policy choices. These kinds of lists have been replicated since: for example, Storey (2001:16) argues that there are four key “heartland activities" of people management: employee involvement and communication; the management of reward; training and development; and recruitment and retention (c.f. Guest 1997). An assumption in many of these “universalist” texts (Brewster, 1999) is that these functional areas will, or perhaps should, operate similarly in all environments.

A variation of functional area approaches focuses on the relationship between HR practices, and overall competitive strategies of the firm. With a starting point that HRM potentially represents a source of real competitive advantage, and that firms will seek to match HRM with overall strategies, a focus has been on the relative presence of high performance work systems; in other words, orientated towards an evaluation of the extent of the presence of what may be seen as flexible as adverse to administrative approaches to people management (Huselid, 1995; Tessema and Soeters, 2006). Such analyses have been founded on a comprehensive exploration of all the functional areas of HRM for the relative presence of practices that may be seen to be falling into the high performance category, examples being performance related reward systems, mechanisms for involving employees for enhancing product quality, and relative skills and qualifications profiles and investment in development (Huselid, 1995: 646). This has led to the refinement of measuring instruments that identify the relative extent of high performance work practices as a means of exploring the internal coherence of organizations and their ultimate orientation (Huselid, 1995; Tessema and Soeters, 2006). However, any listing of HR practices is necessarily a contentious business, reflecting differing approaches towards theory and conceptualizations of strategy (Guest, 1997). There is much to commend research building on such approaches. However, strategy formulation may be bounded: in other words, how firms manage their people may less reflect a process of autonomous and rational strategic choice, but be moulded by existing relationships within and beyond the firm; what HR policies and practices are most functional in a particular time and place will depend on the broader social and regulatory context (Hall and Soskice 2001; Thelen 2001). Moreover, whilst providing sound mechanisms for measuring the extent of high performance work systems, the absence thereof does not necessarily denote an uniformity in people management practice: for example, an important distinction can be drawn between patriarchal (autocratic management policies, coupled with informal rights and obligations) approaches and autocratic fordism (with a greater emphasis on formal rules and procedures, and standardized control mechanisms) (Webster and Wood, 2005).

Hence, much of the contemporary varieties of capitalism literature focuses on the bonds that exist between employee and firm, and the extent to which genuine power is devolved within the organization (Amable, 2003; Whitley, 1999; Thelen, 2001; Hall and Soskice, 2001). This reflects an abiding concern with dominant modes of internal corporate governance, and related issues of power and equity (Hopner 2005); it emphasizes the differences between countries in the way in the way that organizations relate to their employees (Thelen 2001). A limitation of such approaches is that they may ignore the shifting dynamics of power and interests in society at large (Hyman, 2002:65; Roe, 2003). For example, the accession to power of a more conservative government may encourage firms to adopt more hardline approaches regarding issues such as redundancies, even if the basic HR processes and procedures remain generally intact (c.f. Roe, 2003). A second limitation is that relations at the workplace are about conflict and contestation, reflecting the actions of individuals; for example, mechanisms for employee participation may be founded on genuine cooperation, or simply represent another forum for trench warfare between management and employees (Hyman 2002: 66). Nonetheless, they represent a basic starting point for any analysis that sees internal relations within firms in a context of wider social relations, and hence are particularly compatible with broader institutional analyses, and indeed, alternative structural-cultural accounts. We have, therefore, chosen a relationship-based approach as a starting point for our analysis, building on a growing body of earlier relevant research in this area (c.f. Gooderham et al. 1998; Brewster et al., 2006; Brookes et al., 2005; Whitley, 1999). Any list of HR practices necessarily incorporates an element of selectivity (Guest, 1997); our focusing on relations both facilitates analysis, and highlights differences and commonalities in a range of relevant areas. At the same time, we acknowledge that an alternative functional areas approach, exploring the operation of practices such as selection and recruitment, and reward systems in relation to wider organizational strategies, could shed further light on the effects of firm context and practice, and would form a fertile area for future research, particularly as it would facilitate comparisons with earlier work on the relative effects of different approaches to HRM (Guest, 1997; Huselid, 1995).

We centre our analysis on the two core features identified by Whitley (1999; c.f. Thelen, 2000). The first of these, the degree of *employer-employee interdependence* encompasses two sub-dimensions: a) the willingness of the organization to invest in its people - the extent to which the organization is committed to training and development, and b) the relative security of tenure enjoyed by employees (Whitley, 1999: 38; see also Marsden, 1999; Storey, 2001) - the dominant contracts used by the firm (e.g. permanent, temporary or fixed term), the regularity with which the firm makes use of redundancies, the methods employed to reduce staff numbers, and the use of subcontractors. The second feature identified by Whitley is the amount of *delegation to employees*. This concerns issues such as the degree to which managers are willing to allow employees greater discretion in the performance of tasks, the extent to which employers bargain with employee representatives, and mechanisms for involvement and feedback. This is summarised in Table 1.

Table 1: Defining Feature of HRM Practice

Feature	Sub-Dimensions
Employer-Employee Interdependence	• Training and Development (Proportion of employees to recently receive further training, amount of organizational resources devoted to training and development) • Security of Tenure (Forms of contract, prevalence of downsizing, use of outsourced labour)
Delegation to Employees	• Representative Participation (Collective Bargaining, Works Councils) • Financial Participation • Functional Participation and Upward communication • Effectiveness of Formal Downward Communication

(Whitley 1999)

This paper tests whether, and the extent to which, the practices of MNCs tend to be similar across a range of countries *and* different from the dominant ways of managing people in those countries. If MNCs do indeed practice HR management in similar ways worldwide, this would reflect the effects of some common homogenizing pressure ("globalisation"). Given the evidence that HRM is most likely to be an exemplar of practices at one end of the localisation scale (Rosenzweig and Nohria, 1994), it was decided to test the veracity of the similarity, isomorphic and duality accounts, by testing the following hypotheses:

H1: HRM practices will mirror those of the country in which they are domiciled, reflecting the effects of local institutional configurations and/or culture.

H2: HRM practices in MNC subsidiaries will mirror the HRM practices in their country of origin.

H3: HRM practices in MNCs exemplify a common model, reflecting the effects of globalization, to which transnational organizations are the most exposed.

H4: HRM practices in MNC subsidiaries vary from context to context, reflecting the relative strengths of home country versus host country institutions.

In short, we aim to test for similarity, isomorphism or duality and to suggest some explanations for the findings.

METHOD

The data employed in this paper are from the repeating Cranet survey, which now contains evidence on human resource management issues of private and public organizations in 22

European countries, as well as some dozen others (Brewster, Mayrhofer and Morley, 2004). The survey targets organizations that employ more than 200 employees. In a few smaller countries however the survey targets organizations that employ more than 100 employees: about 20% of the observations in the survey involve organizations that employ less than 200 employees (and these have been included in the current paper). About 70% of the survey returns have been completed by the most senior personnel or human resource manager. The other observations involve less senior specialists in the same field or the chief executive or the company secretary. Because the questions asked are mainly factual (yes/no, numbers or percentages) and because we test the data comparatively, and not against internal "outcomes", the problem of single respondent bias is reduced: we acknowledge that the respondents may consistently over or underestimate data, but there seems to be no reason to expect that respondents in different countries or different types of organisation would do that. The overall response rate for the survey has varied over the years of collection from 22% to 15%, good for an all-population survey and comparable to rates for similar surveys (Tregaskis et al., 2004).

The data set used in this paper contains results from the 1999/2000 survey in 19 European countries[ii]. Japan, a country that is often, together with Scandinavia and Germany, often held up as a typical example of a more collaborative variety of capitalism (Hall and Soskice, 2001), and hence is included in this article. The data for all these countries includes at least 100 observations; in total there are 6,939 private sector companies in our sample. The data is broadly representative with respect to the industrial sector in every country. However, because the data is not evenly distributed over the countries, the survey is not representative for the overall area covered.

The fundamental purpose of the paper is to determine the balance between the impact of host country, country of origin and MNC status on the HRM practices of MNCs, Table 2 indicates a framework to categorize the behaviour of organizations; applying these allows for a relatively straightforward proposal to be tested: that different types of firm are similar in terms of their interdependence and delegation. Testing this hypothesis allows us to also examine the issues of similarity, isomorphism and duality.

Table 2: Convergence, Isomorphism or Duality? : Competing Accounts

General Trend	Associated Paradigms	Key Tendency	HR Practices
Convergence with Parent Country or Global Trends	Parent country model/ ethnocentrism	MNCs will mirror practices in parent country on grounds of efficiency and/or ethnocentricity	The spread of country of origin practices worldwide
	Globalisation Theories	Global convergence	An emerging global model for managing people
Isomorphism	Institutional theories (including some regulationist approaches)	Practices will follow the host country, reflecting institutional configurations/ or specific mode of regulation	People management is likely to differ from national context to context. The existence of a limited number of systemic archetypes is likely to make for a limited number of national models of HR practice. These models are subject to evolution and/or rupture and reconstitution.
	Emic and Etic theories	Practices will follow the dominant culture (whether defined objectively [etic] or subjectively [emic]) of the country in which the MNC is domiciled	Fixed modes of HR practice in line with prevailing realities
Duality Theories	Rationalist approaches	Specific organizational and external environments make for specific sets of choices towards or away from global homogenization	A mix between the global and the local in HR practices. The possibility of an "optimal" balance?
	Regulationist theories of space and scale	A contested process of homogenization and localisation. Firms may be impelled towards localisation of practices and/or towards an emerging global model and/or towards parent country practices.	HR practices within MNCs will incorporate aspects of both the global and the local. An optimal and similar balance between local and international ways of managing people is unlikely to be encountered in MNCs operating in different parts of the world.

The process is that for each of the sub-dimensions indicated in Table 2 an empirical model is estimated. Variables from the Cranet survey representing each of the sub-dimensions are used as the dependent variable of a model and estimated as a function of size, industrial sector and country in which the establishment is located. Where the dependent variable is a continuous variable the model is estimated using ordinary least squares[iii] and where the dependent variable is binary a logit model is used[iv].

Once the various models have been estimated they can be re-estimated for different sub-samples of the data, i.e. domestic firms and foreign-owned MNCs, and a straightforward structural test can be applied. If the models are estimated separately for domestic firms and foreign-owned MNC's and there is no real difference in the behaviour of the two groups of firms there should be no statistically significant difference between the estimated results from the individual sub-samples and the results for the overall sample when the two sub-samples are pooled together.[v]

For the explanatory variables, size is measured by the number of employees in the establishment, sectoral differences are controlled for by creating 16 sectoral dummies and country differences are controlled for by creating a dummy variable for each of the 20 countries. A full list of the variables is reproduced in the Appendix. The empirical analysis requires estimating 45 different models, i.e. each of the 15 sub-dimensions for the pooled, domestic and foreign samples, so clearly a large amount of results are generated. Consequently, in the interests of clarity, a sample of the regression results is included in the Appendix (the full set of results are available on request), and the discussion will focus upon the structural tests summarised in Table 4.

FINDINGS

The crux of the analysis is to establish whether the HRM practices of MNCs' subsidiaries are similar to or different from those of their host nation. The behaviour of the organisations are categorised on the basis of a number of indicators of interdependence and delegation. Table 3 records the means, standard deviations and numbers of observations of these variables for the 20 countries included in the analysis, but separated into those firms operating in their own country and those MNCs operating abroad.

Table 3: Interdependence and Delegation: descriptive statistics

Variable	Domestic Firms			Foreign-owned MNC's		
	Mean	*St. Dev.*	*No. Obs.*	*Mean*	*St. Dev.*	*No. Obs.*
Interdependence						
Proportion of wage bill spent on training	*2.8*	*2.89*	*3772*	*3.29*	*2.83*	*747*
Proportion of employees having training in the last year	*42.42*	*31.06*	*4583*	*53.98*	*31.47*	*922*
Formal analysis of training needs (yes/no)	*0.643*	*0.48*	*5837*	*0.8*	*0.4*	*1102*
Number of employees has decreased in last 3 years (yes/no)	*0.08*	*0.26*	*5837*	*0.05*	*0.21*	*1102*
% Decrease in employee s	*16.54*	*18.58*	*4231*	*21.85*	*22.38*	*808*
Harsher methods employed to decrease workforce (yes/no)	*0.55*	*0.49*	*5837*	*0.62*	*0.48*	*1102*
Greater use of more numerically flexible employment {i.e. an ability to rapidly upsize or downsize} (yes/no)	*0.57*	*0.49*	*5837*	*0.69*	*0.46*	*1102*
Proportion of workforce temporary	*2.58*	*1.34*	*5349*	*2.84*	*1.32*	*1027*
Proportion of workforce with fixed term contracts	*2.8*	*1.41*	*5421*	*2.81*	*1.35*	*1025*
Delegation						
Pay bargaining above the establishment level (yes/no)	*0.76*	*0.42*	*5837*	*0.7*	*0.46*	*1102*
Financial Participation (yes/no)	*0.58*	*0.49*	*5837*	*0.71*	*0.45*	*1102*
Union penetration	*4.36*	*2.02*	*5712*	*3.9*	*2.12*	*1084*
Non-bargaining representation (yes/no)	*0.68*	*0.46*	*5837*	*0.61*	*0.49*	*1102*
Change in upward communication in last 3 years (yes/no)	*0.66*	*0.47*	*5837*	*0.76*	*0.43*	*1102*
Change in downward formal communication in last 3 years (yes/no)	*0.81*	*0.39*	*5837*	*0.89*	*0.32*	*1102*

Preliminary observation does suggest that foreign-owned MNCs behave differently to locally owned firms (including local MNCs): for example, they appear to spend more on training, train more people, are more likely to evaluate training needs, etc. However, it is difficult to establish from the raw data whether these differences are significant and if they reflect the differing circumstances facing the observed firms. Consequently, multivariate analysis is applied and the various models outlined in the method section are estimated and then tested for structural differences.

Table 4 records the method of estimation, the calculated test statistic and whether the null hypothesis of domestic and foreign firms behaving the same way can be accepted, for each of the 15 models. These results indicate that foreign-owned MNCs generally behave in a different fashion to domestic firms, since the null hypothesis is rejected in all but one case. Thus, the effects of country of domicile isomorphism seems limited: what MNCs do in their host country is generally different to their indigenous counterparts. Hyphothesis 1 is therefore rejected. Host country institutions or culture do not seem to be generally effective in making MNCs more "local" in their practices; this would reflect more powerful effects of institutional pressures in their country of origin, *or* the emergence of a common model of practice amongst MNCs worldwide, *or* considerable diversity, reflecting variations in the effectiveness of host versus parent country institutional restraints.

Table 4: Structural Tests: Domestic Firms (MNCs and non-MNCs) Vs. Foreign MNC's

Dependent Variable	*Model Type*	*Test Stat.*	*Accept/Reject*
Interdependence			
Proportion of wage bill spent on training	*OLS*	*1.46*	*Reject at 5%*
Proportion of employees having training in the last year	*OLS*	*4.86*	*Reject at 1%*
Formal analysis of training needs	*Logit*	*104.9*	*Reject at 1%*
Number of employees has decreased in last 3 years	*Logit*	*25.3*	*Accept*
% Decrease in employees	*OLS*	*2.7*	*Reject at 1%*
Methods employed to decrease workforce	*Logit*	*65.5*	*Reject at 1%*
Greater use of more flexible employment	*Logit*	*83.1*	*Reject at 1%*
Proportion of workforce temporary	*OLS*	*2.52*	*Reject at 1%*
Proportion of workforce with fixed term contracts	*OLS*	*1.81*	*Reject at 1%*
Delegation			
Pay bargaining above the establishment level	*Logit*	*62.5*	*Reject at 1%*
Financial Participation	*Logit*	*96.6*	*Reject at 1%*
Union penetration	*OLS*	*3.69*	*Reject at 1%*
Non-bargaining representation	*Logit*	*58.9*	*Reject at 1%*
Change in upward communication in last 3 years	*Logit*	*51.9*	*Reject at 1%*
Change in downward formal communication in last 3 years	*Logit*	*77.3*	*Reject at 1%*

However, it must be conceded that the predictive power of the models is fairly low, generally in the region of 10-20%. In fact, differences in size and sector account for about 2% of the variation in the dependent variables. So these only have a small effect upon interdependence and delegation, whilst host country has a larger effect though still relatively small[vi]. The majority of the variation in delegation and interdependence results from factors unobserved in the data set. Since these unobserved differences appear to affect domestic firms and foreign-owned MNCs in a different way, and since the models are already controlled for at the country level, the influences must be forces operating at a range of levels or primarily at an international level. The former would suggest the presence of duality and the latter would indicate similarities cutting across national boundaries: in other words, hypotheses 2, 3 or 4 may be correct.

These alternative hypotheses can also be tested since the domestic samples actually include home-based MNCs: consequently if these unobserved factors – forces associated with globalization - operate at the international level they will affect local MNCs and non-local MNCs differently. Therefore, the process is repeated, this time with domestic-owned MNCs and foreign-owned MNCs as the two sub-samples. Table 5 records the statistics from the raw data and Table 6 reports the structural test results.

Table 5: Interdependence and Delegation: Domestic MNCs and Foreign MNC's

	Domestic-owned MNC's			*Foreign-owned MNC's*		
Variable	***Mean***	***St. Dev.***	***No. Obs.***	***Mean***	***St. Dev.***	***No. Obs.***
Interdependence						
Proportion of wage bill spent on training	*3.21*	*2.83*	*660*	*3.29*	*2.83*	*747*
Proportion of employees having training in the last year	*44.94*	*29.28*	*794*	*53.98*	*31.47*	*922*
Formal analysis of training needs (yes/no)	*0.75*	*0.43*	*1004*	*0.8*	*0.4*	*1102*
Number of employees has decreased in last 3 years (yes/no)	*0.06*	*0.23*	*1004*	*0.05*	*0.21*	*1102*
% Decrease in employees	*18.22*	*19.79*	*772*	*21.85*	*22.38*	*808*
Harsher methods employed to decrease workforce (yes/no)	*0.59*	*0.49*	*1004*	*0.62*	*0.48*	*1102*
Greater use of more flexible employment (yes/no)	*0.66*	*0.47*	*1004*	*0.69*	*0.46*	*1102*
Proportion of workforce temporary	*2.75*	*1.27*	*934*	*2.84*	*1.32*	*1027*
Proportion of workforce with fixed term contracts	*2.75*	*1.22*	*946*	*2.81*	*1.35*	*1025*
Delegation						
Pay bargaining above the establishment level (yes/no)	*0.74*	*0.44*	*1004*	*0.7*	*0.46*	*1102*
Financial Participation (yes/no)	*0.78*	*0.42*	*1004*	*0.71*	*0.45*	*1102*
Union penetration	*4.14*	*2.06*	*981*	*3.9*	*2.12*	*1084*
Non-bargaining representation (yes/no)	*0.75*	*0.43*	*1004*	*0.61*	*0.49*	*1102*
Change in upward communication in last 3 years (yes/no)	*0.71*	*0.46*	*1004*	*0.76*	*0.43*	*1102*
Change in downward formal communication in last 3 years (yes/no)	*0.88*	*0.32*	*1004*	*0.89*	*0.32*	*1102*

Table 6: Structural Tests: Domestic MNC's Vs. Foreign MNC's

Dependent Variable	*Model Type*	*Test Stat.*	*Accept/Reject*
Interdependence			
Proportion of wage bill spent on training	*OLS*	*1.45*	*Reject at 5%*
Proportion of employees having training in the last year	*OLS*	*1.25*	*Accept*
Formal analysis of training needs	*Logit*	*32.9*	*Accept*
Number of employees has decreased in last 3 years	*Logit*	*24*	*Accept*
% Decrease in employees	*OLS*	*1.12*	*Accept*
Methods employed to decrease workforce	*Logit*	*22.4*	*Accept*
Greater use of more flexible employment	*Logit*	*33.0*	*Accept*
Proportion of workforce temporary	*OLS*	*0.75*	*Accept*
Proportion of workforce with fixed term contracts	*OLS*	*1.38*	*Accept*
Delegation			
Pay bargaining above the establishment level	*Logit*	*36.3*	*Accept*
Financial Participation	*Logit*	*44.2*	*Reject at 5%*
Union penetration	*OLS*	*1.60*	*Reject at 5%*
Non-bargaining representation	*Logit*	*7.2*	*Accept*
Change in upward communication in last 3 years	*Logit*	*21.1*	*Accept*
Change in downward formal communication in last 3 years	*Logit*	*23.7*	*Accept*

The Tables show that, with a limited number of exceptions, MNCs pursue similar HRM practices within a specific locale regardless of whether they are foreign subsidiaries or indigenous home operations: in other words – it does not seem that country of origin effects are of overriding importance, other than in a limited number of areas. Hypothesis 2 is therefore rejected; MNCs generally behave differently to their country-specific counterparts, in both home and host countries.

These would leave us with two remaining alternative hypotheses: hypothesis 3 or hypothesis 4. Hypothesis 3 suggests that MNCs tend to behave in a similar way in the manner in which they manage their people. However, some differences were noted, reflecting differences in three areas that would make behaviour different in country of origin to other locales. First, there is the use of training: indigenous firms would probably be more fully aware of the limitations and possibilities of local training systems – particularly those operating at sub-national level - resulting in different approaches towards skills development, whilst foreign owned firms may seek to replicate the dominant approaches to training in their country of origin for the sake of familiarity or other reasons (Marsden, 1999). Second, union penetration varies from country to country: unions tend to be stronger in collaborative market economies, and in certain types of emerging market than in mature liberal market economies and in less developed countries. Third, the varying willingness of firms to make use of financial participation may reflect particular ownership structures and/or company or sectoral specific ways of doing things (Pendleton, et al, 2003). Hence, whilst we cannot reject hypothesis 3 outright, enough differences remain to suggest that what MNCs do in people management remains a contested domain, as a result of the pressures of institutions operating at a range of levels, and/or variations in specific local conditions and the strategic choices open to managers. On the base of survey evidence, Hypothesis 4 seems the most plausible MNCs may mimic the country of origin or host country[vii]. This may reflect the contradictory effects of national regulation and/or the uneven diffusion of emerging transnational best practices (Pendleton, et al, 2003).

DISCUSSION: MNCS AND HOST COUNTRY HRM PRACTICES

Previous research has tended to identify similarities between foreign owned and local firms. Some authors (Amante, 1995; Rosenzweig and Nohria, 1994; Turner, D'Art and Gunnigle, 1997) argued that this was evidence of MNCs adapting to local circumstances. There is no doubt that local subsidiaries will by and large have to accept the limitations of local labour markets and local legislation, for example. Other authors who identified such similarities (Geary and Roche, 2001) argued that this was evidence of local firms emulating foreign MNCs and it seems likely that, to some extent, that would happen also. Our findings are more complex. There was some evidence of national recipes – in other words, most firms tend to do broadly similar things in particular places - though not fully on the lines of the business systems model suggested by Whitley (1999); this would reflect inherent difficulties in categorizing different models of capitalism (Boyer, 2006), as well as the nature of internal systemic diversity.

The study indicated that different patterns and types of ownership – be it simply on the lines of indigenous versus non-indigenous ownership or more complex variations in governance patterns - may make for different sets of practices *within* national business systems, echoing some of the most recent critiques of business systems theory (Brewster, Brookes and Wood, 2006; Streeck and Thelen, 2006;). In other words, the study highlights the varieties of capitalism literature's relative neglect of the nature of internal systemic diversity: MNCs appear to do things differently to others firms within a specific national context, be the latter an MNC's country of origin or of domicile.

This does not, of course, mean that the only determinant of internal variety is MNC status; a dominant mode of practice by local firms does not mean that alternative viable and sustainable paradigms may be not be followed by a minority of firms (c.f. ibid.). At the same time, the survey indicated no evidence of incoherence or "diffuse diversity" (in other words, a huge range of different practices within and across national economies). Rather, we found evidence of alternative packages of practices - that were at least partially determined whether the company was international or not.

For similar reasons, the research seems to have disproved cultural explanations: that what firms do always reflect either the effects of the dominant culture in their country of origin or operation. Rather, it would seem that what firms do represents a product of the relative strength of competing forces regulating their behaviour – formal laws, informal norms and practices, ownership structures, and relations with stakeholders. More broadly speaking, this would highlight the limitations of any explanatory model that makes assumptions of path dependence: what firms do represents not just a product of context, but rather trade offs and compromises between competing pressures and influences.

Although we found that MNCs are likely to do things differently to their non-indigenous counterparts, we similarly found no evidence of any particular model of behaviour common to all MNCs. There was no evidence of MNCs pioneering an emerging set of global best practices that are disseminated into host countries. This would reflect the competing pressures of local and national institutions, as well, as, in specific contexts, the product of transnational institutions such as the EU (Boyer and Hollingsworth, 1997). Whilst we have not tested such an explanation, our evidence would fit with the suggestion that institutions are nested at a range of levels, from local and regional to national and supra-national; making for alternative clusters of practices, some elements of uniformity and predictability to lower transaction costs between actors (Boyer, 2006; c.f. Marsden, 1999).

These findings underscore the complex forces placed on MNCs: proponents of globalisation can get some support from our findings, but so too can those who argue for the importance of localisation. There is much common ground in MNC practices within specific national locales irrespective of whether they are indigenous or foreign owned; enough to suggest that country of origin effects do not override practice in a wide range of areas. However, significant differences remain in three areas: training, union penetration and the existence of financial participation. Hence, we tend to believe that the evidence most strongly supports the duality perspective: providing a good fit with the expectations of authors such Evans et al. (2002) Gooderham et al., (1998), Kostova and Roth (2002) and Davis et al. (2000). The findings also fit well with the conclusions reached from a study of a single MNC conducted by Almond et al (2005), and indeed, contemporary regulationist theories of institutional nestedness (Boyer, 2006; Boyer and Hollingsworth, 1997).

In practice, different aspects of various models may coexist: different levels of union participation, for example, may or may not be associated with higher levels of participation and/.or higher security of tenure and/or the presence of individual mechanisms for involvement (Brewster et al., 2006). This would suggest that any choices made by managers are constrained by a competing range of broader contextual realities, shaping decisions such as whether or not to deal with unions, the relative security of tenure accorded to employees, and the use of a range of forms of involvement and participation. As noted earlier, this would underscore the effects of institutions operating at a range of levels, and the experimental nature of policy making by firms and governments. Sets of practices are replicated on the basis of *complementarity* (in other words, certain practices working better together than on their own) or, simply, the ability to *coexist* (in other words, the use of particular practices do not undermine the effects of the usages of others) (Boyer 2006). When confronted with a relatively strong national or sector specific labour movement, or formal trans-national regulations (e.g. European Union directives), managers may adjust their HR policies to make the best of these particular realities – in other words, seek to build *complementarities.* Alternatively, they may seek to manage round them, combining what may be perceived to be international best practice (e.g. non-union forms of participation) with what they may be obliged to do in a specific national context (e.g. be constrained in their ability to hire or fire) – in other words, seek *coexistence.* National institutions may not be strong enough to impose uniformity on what firms do in a wide range of areas, but neither are managers free to choose HR policies and practices – and other organizational policies and practices – without taking account of local rules, norms and conventions.

Some of the differences between national-specific organizations and MNCs may be represent a direct product of size. Multinational organizations may be in a stronger position to depart somewhat from local norms, owing to their ability to exert pressure on national governments (on account of their being more mobile, and the resources they can bring to bear), but cannot ignore them totally. Again, larger organizations may be able to make use of bureaucratic economies of scale regarding general administrative burdens, freeing up resources to devote to developing more sophisticated HR systems where and when these may be useful (Brewster et al. 2006). Indeed, earlier research has indicated that international firms will have to be more sophisticated than those concentrating on local markets; environments are in a constant stage of flux and evolution necessitating sophisticated and strategic responses (Kim and Gray 2005: 823-4).

The limitations of the data set make a more closely grained analysis impossible. For example, the available data does not allow us the kind of detailed analysis of the observed sample of MNCs necessary to detect whether there are any distinct national identities within this group. We cannot, therefore, contribute to the debate about whether US MNCs are more likely to standardise on a home country pattern than other countries' MNCs (Neghandi, 1986; Young, Hood and Hamill, 1985). Nor can we be fully confident that other measures of HRM might not have shown different results. Our data, taken from a single point in time, allows us to draw no conclusions about the convergence debate (Mayrhofer and Brewster, 2005). There is considerable scope for further research on these issues. However, the evidence that we do have provides firm support for the duality perspective on HRM at the international level.

CONCLUSIONS

We found no evidence of the dominance of a coherent HRM paradigm reflecting the global dissemination of "best practices". Rather than setting HR strategies on rational choice lines, managers seem to combine a range of practices moulded by institutionally-embedded opportunities and constraints operating at a range of levels. The results further revealed that isomorphic pressures operating at the country of domicile – or of origin - are not sufficiently strong so as to make MNCs mimic the HR practices of their local counterparts. In turn, MNCs did not seem to act independently of context, either in imposing a new trans-national model of best practices, or adopting a diverse range of practices reflecting specific organizational needs, and managerial choices. This would suggest two things. Firstly, institutions operate at a range of levels, from sub- to trans-national; firms will seek to respond to these pressures, in one direction or another, reflecting the relative strength of competing rules, norms and conventions, and interest groupings (Boyer, 2006). Whilst this might make for a myriad of different organizational responses, in practice, some clusters of practices are likely to emerge. This would reflect the fact that some practices work better together (e.g. high commitment work systems and supportive development policies) than on their own, the need for some predictability to lower transaction costs between the organization, and other actors and individuals (c.f. Marsden, 1999; Boyer, 2006). Secondly, whilst this would make for some diversity in practices in individual national economies – we found that in most cases MNCs behaved differently to their country-specific peers – this diversity was bounded; there was no evidence of "diffuse diversity". This would underscore the internal diversity of specific national business systems, with two or more – but only a limited number of - combinations of firm level practices readily coexisting in particular national contexts. The latter seemed to be at least partially determined by MNC-status. This points to the strength of the duality thesis which reflects the persistent effects of institutional realities: the fact that neither regulations specific to country of origin or domicile have a dominant effect would underscore the nested nature of institutions, moulding the practices of firms at supra-, national, and sub-national levels (Boyer and Hollingsworth 1997).

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Appendix 1

Variable Definitions

Dependent Variables

Dependent Variable	Definition
Interdependence	
Proportion of wage bill spent on training	annual training budget/annual wage bill
Proportion of employees having training in the last year	trained employees/total employees
Formal analysis of training needs	1 = yes, 0 = no
Number of employees has decreased in last 3 years	1 = yes, 0 = no
% Decrease in employees	jobs lost/original number of employees
Harsher methods employed to decrease workforce	Compulsory redundancy, outplacement, non-renewal fixed-term contracts or outsourcing.
Greater use of more flexible employment	Temporary/casual, fixed-term contracts or subcontracting/outsourcing.
Proportion of workforce temporary	temporary employees/total employees
Proportion of workforce with fixed term contracts	fixed term employees/total employees
Delegation	
Pay bargaining above the establishment level	1 = yes, 0 = no
Financial Participation	Employee share options, profit sharing, group bonus or performance related pay
Union penetration	union members/total employees
Non-bargaining representation, i.e. JCC	1 = yes, 0 = no
Change in upward communication in last 3 years	1 = yes, 0 = no
Change in downward formal communication in last 3 years	1 = yes, 0 = no

Explanatory Variables

Size	Measured as the total number of employees at the establishment.
Sectoral Dummies	Agriculture, hunting, forestry, fishing.
	Energy and water.
	Chemical products; extraction and processing of non-energy minerals.
	Metal manufacturing; mechanical, electrical and instrument engineering; office and data processing machinery.
	Other manufacturing, (e.g. food, drink and tobacco; textiles; clothing; paper, printing and publishing; processing of rubber and plastics, etc.)
	Building and civil engineering.
	Retail and distribution; hotels; catering; repairs.
	Transport and communication (e.g. rail, postal services, telecoms, etc)
	Banking; finance; insurance; business services (e.g. consultancies, PR and advertising, Law firms, etc)
	Personal, domestic, recreational services.
	Health services.
	Other services (e.g. television and radio, R&D, charities, etc)
	Education (including universities and further education).
	Local Government
	Central Government
	Other
Country Dummies	UK, France, Germany, Sweden, Spain, Denmark, Netherlands, Italy, Norway, Switzerland, Turkey, Ireland, Poland, Finland, Greece, Czech Republic, Austria, Belgium, Bulgaria and Japan.

OLS Model: % Trained in Last Year

Variable	Pooled Sample		Domestic Firms		Foreign MNC's	
	Coefficient	t-ratio	Coefficient	t-ratio	Coefficient	t-ratio
Constant	51.60	38.2	49.80	32.2	51.90	18.4
Size	0.00001	1.5	0.00001	1.6	0.0004	1.3
Agric	-0.82	-0.2	2.24	0.6	-4.46	-0.4
Energy	7.32	2.9	9.14	3.5	7.63	1.1
Chemical	9.60	4.9	9.65	4.1	5.02	1.4
Other Manu.	-6.42	-4.7	-4.91	-3.2	-7.47	-2.5
Building	-5.95	-3.1	-2.94	-1.4	-11.90	-2.1
Retail	-0.04	-0.02	0.75	0.4	1.25	0.3
Transport	0.86	0.4	3.13	1.4	-0.25	-0.04
Bank	16.85	10.5	19.35	11.1	12.04	2.9
Pers. Serv.	-1.61	-0.5	1.62	0.4	-6.03	-0.7
Health Serv.	-1.88	-0.9	1.11	0.5	17.30	1.3
Other Serv.	2.75	1.2	5.55	2.4	-1.10	-0.2
Education	0.98	0.4	3.98	1.6	n/a	n/a
Local Gov.	-1.03	-0.5	2.32	1.2	5.09	0.2
Central Gov.	13.58	4.8	17.23	6.1	10.32	0.3
Other	5.20	3.2	5.21	2.8	7.80	2.1
France	-3.54	-1.8	-3.23	-1.6	-1.84	-0.4
Germany	-21.19	-13.3	-22.00	-12.8	-11.27	-2.7
Sweden	11.92	5.4	12.30	5.1	9.02	1.6
Spain	-1.51	-0.7	-5.02	-2.1	9.47	2.1
Denmark	-4.02	-2.1	-5.49	-2.7	3.02	0.6
Netherlands	-12.48	-5.2	-13.97	-5.5	-1.80	-0.2
Italy	-15.82	-4.3	-17.52	-4.6	3.02	0.3
Norway	-11.30	-5.8	-13.68	-6.7	8.33	1.4
Switzerland	-11.50	-4.0	-12.48	-3.9	-6.12	-1.0
Turkey	-4.63	-1.9	-4.66	-1.8	0.87	0.1
Ireland	-5.16	-2.7	-15.39	-6.8	12.68	3.4
Poland	-15.45	-5.8	-19.43	-6.6	-1.85	-0.3
Finland	9.41	4.2	7.93	3.4	21.68	3.1
Greece	-17.04	-5.7	-20.10	-5.9	-8.47	-1.4
Czech Rep.	-7.08	-2.9	-7.64	-2.9	0.29	0.04
Austria	-17.52	-7.3	-18.75	-7.1	-10.72	-1.8
Belgium	-9.40	-4.1	-14.14	-5.0	-0.98	-0.2
Bulgaria	-36.55	-11.9	-36.67	-11.5	-32.33	-2.9
Japan	-21.94	-13.3	-21.60	-12.5	-15.61	-2.0
Dependent Variable	% trained in last year		% trained in last year		% trained in last year	
Mean	44.36		42.42		53.98	
No. of Observations	5505		4583		922	
R-squared	0.15		0.17		0.11	
RSS	4629361.1		3675996.4		808926.7	

$$\text{F statistic} = \frac{(RSS_{pooled} - RSS_{domestic} - RSS_{foreignmnc's})/k}{(RSS_{domestic} + RSS_{foreignmnc's})/(n_1 + n_2 - 2k)}$$

$$= \frac{(4629361.1 - 3675996.4 - 808926.7)/36}{(3675996.4 + 808926.7)/(4583 + 922 - 72)}$$

= 4.86 with a critical F(36, 5433) value of 1.6 at the 1% level the null hypothesis that the structure of the two models is the same can be rejected.

Logit Model: Formal Analysis of Training Needs

Variable	Pooled Sample Coefficient	Pooled Sample t-ratio	Domestic Firms Coefficient	Domestic Firms t-ratio	Foreign MNC's Coefficient	Foreign MNC's t-ratio
Constant	1.62	17.6	1.59	15.1	1.51	7.4
Size	0.000002	0.6	0.000002	0.6	0.0001	0.9
Agric	n/a	n/a	n/a	n/a	n/a	n/a
Energy	0.06	0.3	0.17	0.9	-0.39	-0.7
Chemical	n/a	n/a	n/a	n/a	n/a	n/a
Other Manu.	-0.42	-4.8	-0.41	-4.3	-0.32	-1.5
Building	-0.42	-3.3	-0.34	-2.5	-0.31	-0.7
Retail	-0.50	-4.8	-0.42	-3.7	-0.78	-2.9
Transport	n/a	n/a	n/a	n/a	n/a	n/a
Bank	0.50	4.2	0.70	5.4	-0.39	-1.3
Pers. Serv.	-0.41	-1.83	-0.24	-1.0	-0.83	-1.3
Health Serv.	-0.53	-4.1	-0.40	-3.0	0.25	0.23
Other Serv.	-0.52	-3.6	-0.43	-2.8	-0.56	-1.2
Education	-0.43	-2.8	-0.32	-2.0	n/a	n/a
Local Gov.	-0.68	-5.9	-0.57	-4.8	n/a	n/a
Central Gov.	-0.16	-0.9	-0.02	-0.1	-0.76	-0.5
Other	-0.005	-0.04	0.01	0.1	0.02	0.1
France	0.56	3.1	0.47	2.5	1.28	2.1
Germany	-0.78	-7.0	-0.84	-6.8	-0.32	-1.1
Sweden	-0.41	-2.8	-0.52	-3.2	0.14	0.3
Spain	0.06	0.3	-0.17	-0.9	1.13	2.3
Denmark	-1.06	-8.6	-1.08	-8.0	-0.97	-3.3
Netherlands	-0.49	-2.9	-0.61	-3.4	0.38	0.6
Italy	-0.41	-1.5	-0.53	-1.8	0.75	0.7
Norway	-0.66	-4.9	-0.72	-4.9	-0.29	-0.7
Switzerland	-0.30	-1.5	-0.37	-1.7	0.13	0.3
Turkey	-0.70	-4.3	-0.80	-4.6	0.30	0.5
Ireland	-0.74	-5.6	-1.12	-7.3	0.25	0.8
Poland	-0.51	-2.7	-0.72	-3.4	0.56	1.1
Finland	-0.59	-4.0	-0.72	-4.5	0.67	1.0
Greece	-0.64	-3.1	-0.98	-4.3	0.91	1.6
Czech Rep.	-0.57	-3.2	-0.62	-3.2	-0.13	-0.2
Austria	-0.36	-2.1	-0.55	-3.0	0.87	1.6
Belgium	-0.70	-4.4	-1.00	-5.3	-0.02	-0.1
Bulgaria	-1.73	-9.3	-1.84	-9.2	-0.54	-0.8
Japan	-2.10	-19.1	-2.13	-17.9	-1.65	-3.7
Dependent Variable	Formal analysis		Formal analysis		Formal analysis	
Mean	0.668		0.643		0.797	
No. of Observations	6939		5837		1102	
Log likelihood	-4027.7		-3458.5		-516.7	
Chi-squared	767.1		687.3		79.4	
Degrees of freedom	32		32		30	

Likelihood ratio test is; $LR = 2(LL_{domestic} + LL_{foreignmnc's} - LL_{pooled})$
= 2(-3458.5 –516.7 +4027.7)
= 104.9 with a critical Chi-squared(32 d.f.) of 50.9 at the 1% level the null hypothesis that the structure of the two models is the same can be rejected.

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[i] see also Dunning, 1997; Gray, 1998; Hirst and Thompson, 1999; Prakash and Hart, 2000; Strange, 1998 Farnham, 1994; Williamson, 1996; Moore and Lewis, 1999; Rugman's, 2001; Whitley ,1999) for sceptical views on globalisation

[ii] Including Turkey, a country that straddles two continents.

[iii] [iii] The ordinary least squares models are of the usual form; $y_i = \alpha + \beta' x_i + u_i$ with y_i being the dependent variable, α the intercept term, u_i a normally distributed error term, x_i the vector of explanatory variables and β' their estimated coefficients.

[iv] The logit models are estimated from $L_i = \ln(\frac{P_i}{1-P_i}) = \alpha + \beta' x_i + u_i$ where P_i is the probability that the dependent variable equals 1, 1-P_i is the probability of it being zero and L_i is the log of the odds ratio. Since the log of the odds ratio is linear in the parameters the logit model can be estimated in the linear form (Gujarati 1995).

[v] For the OLS models the structural test is a version of the Chow test where F statistic = $\frac{(RSS_{pooled} - RSS_{domestic} - RSS_{foreignmnc's})/k}{(RSS_{domestic} + RSS_{foreignmnc's})/(n_1 + n_2 - 2k)}$ and *RSS* is the residual sum of squares from the pooled model, the domestic firm model and the foreign MNC's respectively, n_1 is the number of observations from the domestic firm sub-sample and n_2 the same from the foreign owned MNC sub-sample, finally *k* is the number of parameters. The F statistic follows an F distribution with degrees of freedom (k, $n_1 + n_2 - 2k$) (Gujarati 1995). For the logit models the structural test is a likelihood ratio test of the form; $LR = 2(LL_{domestic} + LL_{foreignmnc's} - LL_{pooled})$ where *LR* is the likelihood ratio and *LL* is the maximization of the log-likelihood function from the domestic, foreign MNC and pooled models respectively. *LR* follows a chi-squared distribution with *k* degrees of freedom, where *k* is the number of estimated parameters (Greene 2000).

[vi] An analysis examining just the flexible working practices elements of HRM, using a longitudinal sub-set of this data, found that country differences persist over time (Tregaskis and Brewster, 2006).

[vii] An attempt was made to test hypothesis 4 further by estimating the models separately for US MNCs, UK MNCs and German MNC's, (these were the only countries having sufficient numbers to estimate the models). If MNCs behave the same irrespective of the country of origin, the dummy variables in the model will be insignificant: hypothesis 2 would be correct. Unfortunately, no coherent results were generated (sampling limitations precluding a more detailed analysis).